

## OBITUARY

### John Heath (1922–1987)



On July 6th 1987, entomology suffered a sudden and tragic loss with the death of John Heath. John was well known and respected throughout Britain and Europe, as a leading entomologist and conservationist. He had within him elements of researcher, developer and teacher and in all three fields he left his mark. Professionally, he made a major contribution to conservation by establishing the idea of data banks as the corner-stone for both local and national conservation policy. This involved not only the organization of recording schemes but also the development of a data storage system geared to the production of local lists or national distribution maps. Subsequently, John travelled widely to describe these systems and to assist others in similar developments. He achieved much through the friendships that he so easily forged with fellow entomologists in both professional and recreational contacts. In Britain, he will be widely remembered for his launch and editorship of *The moths and butterflies of Great Britain and Ireland* and for the development of the portable moth trap that bears his name — the Heath trap. Those who knew him as a friend, however, will remember his generosity, helpfulness and humour and his frequent role as a source of inspiration. He will be sadly missed.

John was born in Worcester, on January 18th 1922. His father, who had been an officer in the Indian army, subsequently took up teaching and this brought about a move to the Southampton area, where John was educated at King Edward VI School. His interest in entomology developed during a youth spent amongst the beautiful country of the Hamble estuary and he recently renewed contact with some of his old haunts, to compare the modern fauna with that of his youth.

Entomology remained a hobby during his school days and his career objectives were directed more towards electronics, with the intention of leaving school for a University course at Cambridge. However, the Second World War had started and John joined the army. His interest in electronics was noted and when radar became an important element in Britain's air defences, John was amongst the first to be involved in installation and maintenance of the equipment. His postings took him to many parts of southern England and in his spare time he was able to continue his entomological hobby in such choice locations as the Falmouth and Lizard regions of Cornwall. He was, at this time, a member of the Society for British Entomology and some of his earliest papers, written whilst still in the army, were published in the proceedings of that society.

Returning to civilian life after the war, John was unable to take up his intended course through University, nor could he find employment in the electrical industry. Thus, in 1947, he turned to his hobby of entomology as a source of employment. Taking up a post with Pest Control of Bourne, Cambs, he became involved with agrochemical research, working on laboratory and field evaluation of new insecticides. Field trials took him to Rhodesia for a year, whilst laboratory screening gave him his first experience of data storage. Large volumes of screening results needed storing in a way that would facilitate future recall and comparison. Computerization was still far into the future at this time.

John's interest in entomology centred more on insect study than on insect control and in 1953 he joined the Nature Conservancy as an experimental officer at the Merlewood Research Station, Cumbria. His period in industry, however, left him with a broad and realistic view of the management of the countryside for economic use or conservation.

The move to Merlewood was a turning point in John's life in many ways. Not only did it mark the start of his professional involvement with Lepidoptera, but it also introduced him to his future wife, Joan, whom he married in 1955. A year later their son, Nigel, was born, completing a family circle that was always important to him. As the volume of travelling increased in his later career, John rarely travelled far without Joan and her quiet support from the background was of far greater value than the casual observer might have realised.

Working at Merlewood enabled John to produce his first important paper on Lepidoptera. His account of the insects associated with Yellow Balm (*Impatiens noli-tangere*), published in 1959, contained a valuable section on the abundance, distribution and ecology of the Netted Carpet moth, *Eustroma reticulatum* D & S. John re-evaluated this species in 1980/81 and the details presented in his presidential address to the BENHS in 1983 showed that the conservation measures recommended by his first report had indeed been successful. His work at Merlewood was not restricted to Lepidoptera, however, and he also published an important paper on the feeding habits of a small soil-living millipede, *Glomeris marginata* (Villers).

The need to record Lepidoptera in remote sites was evident during his studies on the Netted Carpet and this gave John the stimulus to put his electronics to work to develop the small, portable moth trap now generally known as the Heath trap. He published details in the *Entomologist's Record* in 1965 but within the last few years had been testing improvements to the original design and had incorporated modern advances in lighting technology to reduce the power consumption of the trap to about  $\frac{1}{3}$  of its original level.

In 1967 John transferred to the Monks Wood Experimental Station to set up a scheme for producing national distribution maps for the British insects. Not surprisingly, the Lepidoptera scheme was the first and the biggest of these. The

concept spread to Europe as a result of John's collaboration with Professor Leclercq in setting up the European Invertebrate Survey. This marked the start of a period of fairly regular European travel for John, as he helped other countries set up their own data banks. His international reputation grew rapidly but it was not until late in his career that John achieved the rank of principal scientific officer and in 1979 he became Head of the Biological Records Centre.

The mapping schemes produced data that went into many important works. The butterfly maps formed the basis for the *Atlas of butterflies in Britain and Ireland*, produced in collaboration with E. Pollard and J. A. Thomas. The IUCN Red Data books also took data from these schemes and have been paralleled by such works as *Threatened Rhopalocera (Butterflies) in Europe* produced by the Council of Europe. Moth maps have been produced for *The moths and butterflies of Great Britain and Ireland*.

The mapping schemes run by the Nature Conservancy rely upon data generated by amateurs but processed at Monks Wood. John soon realised that whilst there were many prepared to provide this data, the numbers with the expertise to reliably identify difficult species were relatively low. To tackle this, he organized a field course under the auspices of the Field Studies Council to train enthusiasts in field recording, identification and record-keeping techniques. This started in 1968 with a course at Preston Montford, Shrewsbury but demand was such that it became an annual event and by 1985 had reached a total of 28 courses, including three in Ireland and two in the Alps. In the UK, the Field Studies Council centres at Nettlecombe Court and Preston Montford featured strongly and John's advance preparation resulted in some fine locations being visited. Twenty-seven species of butterfly were recorded on one day trip in Somerset and over 100 Macrolepidoptera on more than one evening session with lights. Examination of problem material brought by course students resulted in the identification of the first British specimen of *Eriopygodes imbecilla*.

A major function of the courses was training in identification techniques for difficult species and it soon became evident that the literature in most common use at that time was of little help in this. With various colleagues, John set out to supplement the textbooks with a series of short papers in the *Entomologists Gazette* under the serial title of 'Guide to the critical species'. In all, seven of these were produced but even this satisfied only part of the need and John quickly realised that a totally new standard reference work was the only real answer. Thus he set about the task of launching a major new series, *The moths and butterflies of Great Britain and Ireland* (M.B.G.B.I.). Early volumes were beset with many problems and it is doubtful whether the series could have survived these early traumas without John's total commitment to the project. Endless hours and even personal capital were sunk into it, before Harley Books set the series on a more secure footing.

John was a fairly prolific author of entomological papers and despite the time taken by M.B.G.B.I. and increasing demands of his career, he produced or contributed to 55 titles listed in the Zoological Record since 1976 and many more prior to that.

John's particular sphere of specialization was in that curious group of mandibulate Lepidoptera, the Micropterigidae. In this he was an authority of international acclaim, which enabled him to work on collections from many parts of the world. Nine of the 55 papers mentioned above relate to this topic and in these, a total of no fewer than 14 new species were described, with clarification of the taxonomic status of some others. The most recent, published in the *Entomologists Gazette* in 1986, described seven new species from North Africa. Earlier papers covered species from



Spain, Italy and Yugoslavia and during his entire career, over 20 papers were produced on the Micropterigidae, going back as far as 1958.

Despite heavy commitments, John still found time to take an active role in many entomological societies. From his early membership of the Society for British Entomology, he became a fellow of the Royal Entomological Society in 1945 and a member of BENHS in 1954. His membership of the Amateur Entomologist's Society dated from the mid 1960s and he was also an active member of his local county trust, serving as its chairman for three years from 1977 to 1979. During his presidency of the BENHS in 1982, his detailed knowledge of entomological literature and personal acquaintance with many authors proved of great value to the committee when deciding on library acquisitions or exchanges. As with insect surveys, so also was John's interest in societies European rather than just British. He acted as the British membership secretary to the Societas Europaea Lepidopterologica and played an integral role in the organization of the third biennial European Congress of Entomology at Cambridge in 1982.

John was such an active and gregarious entomologist that his loss will be severely felt by many and the gap that he leaves in British entomology is unlikely to be filled by any one person.

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### ANNOUNCEMENT

**London area Lepidoptera records wanted — macro and micro.** — I am currently preparing a list of the Microlepidoptera and updating Baron de Worms' list of the Macrolepidoptera (published in the 1950s) of the London Natural History Society's recording area (a circle radius 20 miles centred upon St Paul's Cathedral). I am also producing tetrad distribution maps of records made from 1 January 1980 onwards. All data will eventually be published. I would welcome records from anyone who has collected or who intends to collect in this area, which includes all of Middlesex and portions of the vice-counties of Hertfordshire, North Essex, South Essex, West Kent, Surrey and Buckinghamshire. I should be pleased to provide further details, maps and recording sheets if needed, to any entomologists who may care to contact me. C. W. Plant, London Natural History Society, Passmore Edwards Museum, 29 Romford Road, Stratford, London E15 4LZ.